

WHAT IS CLAIMED IS:

1. A method for selecting and producing a therapeutic compound which is presumed selective for one or a restricted set of given transcriptional pathways and of given cell types or for validating a putative
5 useful compound as a selective therapeutic compound towards said one or restricted set of given transcriptional pathways and cell types, which comprises:
 - providing a construct which comprises a reporter gene, the expression of which is driven in a host cell by a promoter capable of directing transcription of the gene operably
10 linked thereto upon activation, which promoter comprises a minimal promoter, and upstream to said minimal promoter, a transcription factor-responsive element which is capable of affecting the activity of the minimal promoter upon binding by a transcription factor endogenously
15 produced, activated or inactivated by the host cell upon contacting by the compound; the construct being provided for a plurality of transcription-factor responsive elements for a given cell line and for a plurality of cell lines representative of different tissues;
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 - inserting each construct into the genome of the host cell of each cell line, thereby obtaining a library of recombinant cell lines;
 - contacting the compound with the library of recombinant cell
25 lines;

- detecting a change in the expression of the reporter gene occurring in one recombinant cell line or in a subset of recombinant cell lines and not in other cell lines of the library as an indication of a selective effect of said compound on a cell type *in vivo*; and
- formulating the compound in a medication to be administered to a patient or tested in a patient for confirmation of its capacity to selectively treat a disease affecting a tissue represented by the cell type.

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2. The method of claim 1, wherein the construct is provided for at least two transcription factors selected from appendix I.

3. The method of claim 2, wherein the construct is provided for at least two transcription factor-responsive elements selected from appendix I.

4. The method of claim 1, 2 or 3, wherein the transcription factor-responsive element is present in more than one copy placed in tandem.

5. The method of any one of claims 1 to 4, wherein the construct is a retroviral construct modified to be incapable of transmitting a retroviral disease and to be incapable of acting as a promoter for the reporter gene.

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6. The method of any one of claims 1 to 5, wherein detecting the change in the expression of the reporter gene is made through the detection of the formation of an amplified product by a polymerase chain reaction primed with amplification primers complementary to an expressed sequence comprising the reporter gene, or is made through the detection of the gene product of the reporter gene.

7. The method of claim 6, wherein the detection of the gene product of the reporter gene is made through the detection of the formation of an immune complex with an antibody directed against the gene product.

8. The method of claim 6, wherein the detection of the gene product of the reporter gene is made through the detection of a luminescent or fluorescent gene product.

9. The method of claim 8, wherein the reporter gene is coding for the green fluorescent protein (GFP).

10. A repertory of recombinant constructs for transforming a plurality of host cell types representative of a plurality of biological tissues which comprises a reporter gene and, operably linked thereto, a promoter comprising a minimal promoter and, upstream to said minimal promoter, a transcription factor-responsive element (TFRE) which can be bound by a transcription factor of a host cell, the diversity of the repertory being due to a plurality of TFREs.

11. The repertory of claim 10 wherein the TFRE comprises any one of the TFREs listed in appendix I.

13. The repertoire of any one of claims 10 to 12, wherein the construct is a retroviral construct.

5 14. A library of recombinant cells transformed
with the constructs of the repertory of any one of claims 10 to 13.